

ABSTRACT

A base plate for a spindle motor is provided defining a minimal axial gap with a relatively rotatable magnet. In an example, a surface of the base plate is positioned at 0.1 mm from an adjacent surface of a relatively rotatable magnet. The base plate is comprised of a composite material such that stiffness is improved and acoustic vibration is reduced, while maintaining low power consumption and a fast start-up time. A first material, being a nonmagnetic material is employed adjacent to a motor magnet, and a second material having a preferred stiffness is employed at a greater radial distance from the magnet than the radial distance between a stator and the magnet.